

Bibliography

- AchutaRao, K., and K. R. Sperber (2002), Simulation of the El Niño Southern Oscillation: Results from the Coupled Model Intercomparison Project, *Climate Dynamics*, 19, 191–209.
- Alexander, M., J. Yin, G. Branstator, A. Capotondi, C. Cassou, R. Cullather, Y.-O. Kwon, J. Norris, J. Scott, and I. Wainer (2006), Extratropical atmosphere-ocean variability in CCSM3, *Journal of Climate*, 19(11), 2496–2525.
- Arakawa, A., and V. R. Lamb (1977), Computational design of the basic dynamical processes of the UCLA general circulation model, in *General Circulation Models of the Atmosphere, Methods in Computational Physics*, vol. 17, edited by J. Chang, pp. 173–265, Academic Press.
- Australian Partnership for Advanced Computing (2005), APAC National Facility Home Page, URL <http://nf.apac.edu.au/>, viewed 23 April 2005.
- Bard, E. (2002), Climate shock: Abrupt changes over millennial time scales, *Physics Today*, pp. 32–38.
- Bell, J., P. Duffy, C. Covey, L. Sloan, and the CMIP investigators (2000), Comparison of temperature variability in observations and sixteen climate model simulations, *Geophysical Research Letters*, 27(2), 261–264.
- Berger, A., and M. F. Loutre (2004), Astronomical theory of climate change, *Journal de Physique IV France*, 121, 1–35.
- Bi, D. (2002), Transient and long-term behaviour of the world ocean under global warming, Ph.D. thesis, University of Tasmania.
- Bi, D., W. F. Budd, A. C. Hirst, and X. Wu (2001), Collapse and reorganisation of the Southern Ocean overturning under global warming in a coupled model, *Geophysical Research Letters*, 28(20), 3927–3930.
- Bi, D., W. F. Budd, A. C. Hirst, and X. Wu (2002), Response of the Antarctic Circumpolar Current transport to global warming in a coupled model, *Geophysical Research Letters*, 29(24), 2173, doi:10.1029/2002GL015919.
- Bigg, G. R., and M. R. Wadley (2001), Millennial-scale variability in the oceans: an ocean modelling view, *Journal of Quaternary Science*, 16(5), 309–319.

- Boer, G. J., G. Flato, M. C. Reader, and D. Ramsden (2000), A transient climate change simulation with greenhouse gas and aerosol forcing: experimental design and comparison with the instrumental record for the twentieth century, *Climate Dynamics*, *16*, 405–425.
- Bonfils, C., N. de Noblet-Ducoudré, J. Guiot, and P. Bartlein (2004), Some mechanisms of mid-Holocene climate change in Europe, inferred from comparing PMIP models to data, *Climate Dynamics*, *23*, 79–98.
- Boville, B. A., and P. R. Gent (1998), The NCAR Climate System Model, version one, *Journal of Climate*, *11*, 1115–1130.
- Braconnot, P., S. Joussaume, O. Marti, and N. de Noblet (1999), Synergistic feedbacks from ocean and vegetation on the African monsoon response to mid-Holocene insolation, *Geophysical Research Letters*, *26*(16), 2481–2484.
- Braconnot, P., S. Joussaume, N. de Noblet, and G. Ramstein (2000a), Mid-Holocene and Last Glacial Maximum African monsoon changes as simulated within the Paleoclimate Modelling Intercomparison Project, *Global and Planetary Change*, *26*, 51–66.
- Braconnot, P., O. Marti, S. Joussaume, and Y. Leclainche (2000b), Ocean feedback in response to 6 kyr BP insolation, *Journal of Climate*, *13*, 1537–1553.
- Bretherton, C. S., T. Uttal, C. W. Fairall, S. E. Yuter, R. A. Weller, D. Baumgardner, K. Comstock, R. Wood, and G. B. Raga (2004), The EPIC 2001 stratocumulus study, *Bulletin of the American Meteorological Society*, *85*(7), 967–977.
- Broccoli, A. J., K. W. Dixon, T. L. Delworth, T. R. Knutson, and R. J. Stouffer (2003), Twentieth-century temperature and precipitation trends in ensemble climate simulations including natural and anthropogenic forcing, *Journal of Geophysical Research*, *108*(D24), 4798, doi:10.1029/2003JD003812.
- Broecker, W. S. (1986), Oxygen isotope constraints on surface ocean temperatures, *Quaternary Research*, *26*, 121–134.
- Broström, A., M. Coe, S. P. Harrison, R. Gallimore, J. E. Kutzbach, J. Foley, I. C. Prentice, and P. Behling (1998), Land surface feedbacks and palaeomonsoons in northern Africa, *Geophysical Research Letters*, *25*(19), 3615–3618.
- Brovkin, V., J. Bendtsen, M. Claussen, A. Ganopolski, C. Kubatzki, V. Petoukhov, and A. Andreev (2002), Carbon cycle, vegetation, and climate dynamics in the Holocene: Experiments with the CLIMBER-2 model, *Global Biogeochemical Cycles*, *16*(4), 1139, doi:10.1029/2001GB001662.
- Bryan, F. (1986), High-latitude salinity effects and interhemispheric thermohaline circulations, *Nature*, *323*, 301–304.
- Bryan, F. O., G. Danabasoglu, N. Nakashiki, Y. Yoshida, D.-H. Kim, J. Tsutsui, and S. C. Doney (2006), Response of the North Atlantic thermohaline circulation and ventilation to increasing carbon dioxide in CCSM3, *Journal of Climate*, *19*(11), 2382–2397.

- Bryan, K. (1969), A numerical method for the study of the circulation of the world ocean, *Journal of Computational Physics*, *4*, 347–376.
- Bryan, K., S. Manabe, and R. C. Pacanowski (1975), A global ocean-atmosphere climate model. Part II. The oceanic circulation, *Journal of Physical Oceanography*, *5*, 30–46.
- Bryden, H. L. (1973), New polynomials for thermal expansion, adiabatic temperature gradient and potential temperature of sea water, *Deep-Sea Research*, *20*, 401–408.
- Bush, A. B. G. (1999), Assessing the impact of Mid-Holocene insolation on the atmosphere-ocean system, *Geophysical Research Letters*, *26*(1), 99–102.
- Cai, W. (1995), Interdecadal variability driven by mismatch between surface flux forcing and oceanic freshwater/heat transport, *Journal of Physical Oceanography*, *25*, 2643–2666.
- Cai, W., M. A. Collier, H. B. Gordon, and L. J. Waterman (2003), Strong ENSO variability and a super-ENSO pair in the CSIRO coupled climate model, *Monthly Weather Review*, *131*, 1189–1210.
- Carmack, E. C. (1977), Water characteristics of the Southern Ocean south of the Polar Front, *Deep-Sea Research*, *24*(Supplement), 15–41.
- Cess, R. D., and G. L. Potter (1987), Exploratory studies of cloud radiative forcing with a general circulation model, *Tellus*, *39A*, 460–473.
- Cheddadi, R., G. Yu, J. Guiot, S. P. Harrison, and I. C. Prentice (1997), The climate of Europe 6000 years ago, *Climate Dynamics*, *13*, 1–9.
- Chouinard, C., M. B eland, and N. McFarlane (1986), A simple gravity wave drag parameterization for use in medium-range weather forecast models, *Atmosphere-Ocean*, *24*(2), 91–110.
- Chu, P. C., Y. Chen, and S. Lu (1998), On Haney-type surface thermal boundary conditions for ocean circulation models, *Journal of Physical Oceanography*, *28*, 890–901.
- Claussen, M., and V. Gayler (1997), The greening of the Sahara during the mid-Holocene: results of an interactive atmosphere-biome model, *Global Ecology and Biogeography Letters*, *6*, 369–377.
- Claussen, M., L. A. Mysak, A. J. Weaver, M. Crucifix, T. Fichet, M.-F. Loutre, S. L. Weber, J. Alcamo, V. A. Alexeev, A. Berger, R. Calov, A. Ganopoloski, H. Goosse, G. Lohmann, F. Lunkeit, I. I. Mokhov, V. Petoukhov, P. Stone, and Z. Wang (2002), Earth system models of intermediate complexity: closing the gap in the spectrum of climate system models, *Climate Dynamics*, *18*, 579–586.
- Clement, A. C., R. Seager, and M. A. Cane (2000), Suppression of El Ni o during the mid-Holocene by changes in the Earth’s orbit, *Paleoceanography*, *15*(6), 731–737.

- Coe, M. T., and G. B. Bonan (1997), Feedbacks between climate and surface water in northern Africa during the middle Holocene, *Journal of Geophysical Research*, *102*(D10), 11,087–11,101.
- COHMAP members (1988), Climatic changes of the last 18,000 years: Observations and model simulations, *Science*, *241*, 1043–1052.
- Collins, W. D., C. M. Bitz, M. L. Blackmon, G. B. Bonan, C. S. Bretherton, J. A. Carton, P. Chang, S. C. Doney, J. J. Hack, T. B. Henderson, J. T. Kiehl, W. G. Large, D. S. McKenna, B. D. Santer, and R. D. Smith (2006), The Community Climate System Model version 3 (CCSM3), *Journal of Climate*, *19*(11), 2122–2143.
- Covey, C., K. N. AchutaRao, U. Cubasch, P. Jones, S. J. Lambert, M. E. Mann, T. J. Phillips, and K. E. Taylor (2003), An overview of results from the Coupled Model Intercomparison Project, *Global and Planetary Change*, *37*, 103–133.
- Cox, M. D. (1984), A primitive equation, 3-dimensional model of the ocean, *Technical Report 1*, Geophysical Fluid Dynamics Laboratory Ocean Group.
- Cox, M. D. (1987), Isopycnal diffusion in a z -coordinate ocean model, *Ocean Modelling*, *74*, 1–5.
- Crucifix, M., M.-F. Loutre, P. Tulkens, T. Fichefet, and A. Berger (2002), Climate evolution during the Holocene: a study with an Earth system model of intermediate complexity, *Climate Dynamics*, *19*, 43–60.
- Crucifix, M., P. Braconnot, S. P. Harrison, and B. Otto-Bliesner (2005), Second phase of Paleoclimate Modelling Intercomparison Project, *EOS, Transactions, American Geophysical Union*, *86*(28), 264.
- Cubasch, U., K. Hasselmann, H. Höck, E. Maier-Reimer, U. Mikolajewicz, B. D. Santer, and R. Sausen (1992), Time-dependent greenhouse warming computation with a coupled atmosphere-ocean model, *Climate Dynamics*, *8*, 55–69.
- Cubasch, U., G. A. Meehl, G. J. Boer, R. J. Stouffer, M. Dix, A. Noda, C. A. Senior, S. Raper, and K. S. Yap (2001), Projections of future climate change, in *Climate Change 2001: The Scientific Basis*, edited by J. T. Houghton, Y. Ding, D. J. Griggs, M. Noguer, P. J. van der Linden, X. Dai, K. Maskell, and C. A. Johnson, chap. 9, pp. 525–582, Cambridge University Press.
- Cunningham, S. A., S. G. Alderson, B. A. King, and M. A. Brandon (2003), Transport and variability of the Antarctic Circumpolar Current in Drake Passage, *Journal of Geophysical Research*, *108*(C5), 8084, doi:10.1029/2001JC001147.
- Delworth, T. L., A. J. Broccoli, A. Rosati, R. J. Stouffer, V. Balaji, J. A. Beesley, W. F. Cooke, K. W. Dixon, J. Dunne, K. A. Dunne, J. W. Durachta, K. L. Findell, P. Ginoux, A. Gnanadesikan, C. T. Gordon, S. M. Griffies, R. Gudgel, M. J. Harrison, I. M. Held, R. S. Hemler, L. W. Horowitz, S. A. Klein, T. R. Knutson, P. J. Kushner, A. R. Langenhorst, H.-C. Lee, S.-J. Lin, J. Lu, S. L. Malyshev, P. C. D.

- Milly, V. Ramaswamy, J. Russell, M. D. Schwarzkopf, E. Shevliakova, J. J. Sirutis, M. J. Spelman, W. F. Stern, M. Winton, A. T. Wittenberg, B. Wyman, F. Zeng, and R. Zhang (2006), GFDL's CM2 global coupled climate models. Part I: Formulation and simulation characteristics, *Journal of Climate*, *19*, 643–674.
- de Noblet, N., P. Braconnot, S. Joussaume, and V. Masson (1996), Sensitivity of simulated Asian and African summer monsoons to orbitally induced variations in insolation 126, 115 and 6 kBP, *Climate Dynamics*, *12*, 589–603.
- de Noblet-Ducoudré, N., M. Claussen, and C. Prentice (2000), Mid-Holocene greening of the Sahara: first results of the GAIM 6000 year BP experiment with two asynchronously coupled atmosphere/biome models, *Climate Dynamics*, *16*, 643–659.
- Deser, C., A. Capotondi, R. Saravanan, and A. S. Phillips (2006), Tropical Pacific and Atlantic climate variability in CCSM3, *Journal of Climate*, *19*(11), 2451–2481.
- Dixon, K. W., T. L. Delworth, T. R. Knutson, M. J. Spelman, and R. J. Stouffer (2003), A comparison of climate change simulations produced by two GFDL coupled climate models, *Global and Planetary Change*, *37*, 81–102.
- Doherty, R., J. Kutzbach, J. Foley, and D. Pollard (2000), Fully coupled climate/dynamical vegetation model simulations over Northern Africa during the mid-Holocene, *Climate Dynamics*, *16*, 561–573.
- Dong, B., P. J. Valdes, and N. M. J. Hall (1996), The changes of monsoonal climates due to Earth's orbital perturbations and ice age boundary conditions, *Palaeoclimates*, *1*, 203–240.
- Duffy, P. B., and K. Caldeira (1997), Sensitivity of simulated salinity in a three-dimensional ocean model to upper ocean transport of salt from sea-ice formation, *Geophysical Research Letters*, *24*(11), 1323–1326.
- Duffy, P. B., J. Bell, C. Covey, L. Sloan, and the CMIP investigators (2000), Effects of flux adjustments on temperature variability in climate models, *Geophysical Research Letters*, *27*(6), 763–766.
- England, M. H. (1993), Representing the global-scale water masses in ocean general circulation models, *Journal of Physical Oceanography*, *23*, 1523–1552.
- England, M. H., and A. C. Hirst (1997), Chlorofluorocarbon uptake in a world ocean model: 2. Sensitivity to surface thermohaline forcing and subsurface mixing parameterisations, *Journal of Geophysical Research*, *102*(C7), 15,709–15,731.
- Fanning, A. F., and A. J. Weaver (1997), On the role of flux adjustments in an idealized coupled climate model, *Climate Dynamics*, *13*, 691–701.
- Fels, S. B., and M. D. Schwarzkopf (1975), The simplified exchange approximation: A new method for radiative transfer calculations, *Journal of the Atmospheric Sciences*, *32*, 1475–1488.

- Fels, S. B., and M. D. Schwarzkopf (1981), An efficient, accurate algorithm for calculating CO₂ 15 μ m band cooling rates, *Journal of Geophysical Research*, *86*(C2), 1205–1232.
- Flato, G. M., and W. D. Hibler III (1990), On a simple sea-ice dynamics model for climate studies, *Annals of Glaciology*, *14*, 72–77.
- Flato, G. M., and W. D. Hibler III (1992), Modeling pack ice as a cavitating fluid, *Journal of Physical Oceanography*, *22*, 626–651.
- Flato, G. M., and Participating CMIP Modelling Groups (2004), Sea-ice and its response to CO₂ forcing as simulated by global climate models, *Climate Dynamics*, *23*, 229–241.
- Fofonoff, N. P. (1985), Physical properties of seawater: A new salinity scale and equation of state for seawater, *Journal of Geophysical Research*, *90*(C2), 3332–3342.
- Foley, J. A., J. E. Kutzbach, M. T. Coe, and S. Levis (1994), Feedbacks between climate and boreal forests during the Holocene epoch, *Nature*, *371*, 52–54.
- Folland, C. K., T. R. Karl, J. R. Christy, R. A. Clarke, G. V. Gruza, J. Jouzel, M. E. Mann, J. Oerlemans, M. J. Salinger, and S.-W. Wang (2001), Observed climate variability and change, in *Climate Change 2001: The Scientific Basis*, edited by J. T. Houghton, Y. Ding, D. J. Griggs, M. Noguer, P. J. van der Linden, X. Dai, K. Maskell, and C. A. Johnson, chap. 2, pp. 99–181, Cambridge University Press.
- Gargett, A. E. (1984), Vertical eddy diffusivity in the ocean interior, *Journal of Marine Research*, *42*(2), 359–393.
- Gates, W. L., and A. B. Nelson (1975a), A new (revised) tabulation of the Scripps topography on a 1 degree global grid: Part I, Terrain heights, *Technical Report R-1276-1-ARPA*, The Rand Corporation.
- Gates, W. L., and A. B. Nelson (1975b), A new (revised) tabulation of the Scripps topography on a 1 degree global grid: Part II, Ocean depths, *Technical Report R-1277-1-ARPA*, The Rand Corporation.
- Gent, P. R., and J. C. McWilliams (1990), Isopycnal mixing in ocean circulation models, *Journal of Physical Oceanography*, *20*, 150–155.
- Gent, P. R., J. Willebrand, T. J. McDougall, and J. C. McWilliams (1995), Parameterizing eddy-induced tracer transports in ocean circulation models, *Journal of Physical Oceanography*, *25*, 463–474.
- Gill, A. E. (1973), Circulation and bottom water formation in the Weddell Sea, *Deep-Sea Research*, *20*, 111–140.
- Gleckler, P. J., D. A. Randall, G. Boer, R. Colman, M. Dix, V. Galin, M. Helfand, J. Kiehl, A. Kitoh, W. Lau, X.-Y. Lang, V. Lykossov, B. McAvaney, K. Miyakoda, S. Planton, and W. Stern (1995), Cloud-radiative effects on implied oceanic energy

transports as simulated by atmospheric general circulation models, *Geophysical Research Letters*, *22*, 791–794.

Gnanadesikan, A., K. W. Dixon, S. M. Griffies, V. Balaji, M. Barreiro, J. A. Beesley, W. F. Cooke, T. L. Delworth, R. Gerdes, M. J. Harrison, I. M. Held, W. J. Hurlin, H.-C. Lee, Z. Liang, G. Nong, R. C. Pacanowski, A. Rosati, J. Russell, B. L. Samuels, Q. Song, M. J. Spelman, R. J. Stouffer, C. O. Sweeney, G. Vecchi, M. Winton, A. T. Wittenberg, F. Zeng, R. Zhang, and J. P. Dunne (2006), GFDL's CM2 global coupled climate models. Part II: The baseline ocean simulation, *Journal of Climate*, *19*, 675–697.

Goosse, H., F. M. Selten, R. J. Haarsma, and J. D. Opsteegh (2003), Large sea-ice volume anomalies simulated in a coupled climate model, *Climate Dynamics*, *20*, 523–536.

Gordon, A. L. (1986), Inter-ocean exchange of thermocline water, *Journal of Geophysical Research*, *91*(C4), 5037–5046.

Gordon, C., C. Cooper, C. A. Senior, H. Banks, J. M. Gregory, T. C. Johns, J. F. B. Mitchell, and R. A. Wood (2000), The simulation of SST, sea ice extents and ocean heat transports in a version of the Hadley Centre coupled model without flux adjustments, *Climate Dynamics*, *16*, 147–168.

Gordon, H. B. (1981), A flux formulation of the spectral atmospheric equations suitable for use in long-term climate modeling, *Monthly Weather Review*, *109*, 56–64.

Gordon, H. B., and S. P. O'Farrell (1997), Transient climate change in the CSIRO coupled model with dynamic sea ice, *Monthly Weather Review*, *125*(5), 875–907.

Gordon, H. B., L. D. Rotstayn, J. L. McGregor, M. R. Dix, E. A. Kowalczyk, S. P. O'Farrell, L. J. Waterman, A. C. Hirst, S. G. Wilson, M. A. Collier, I. G. Watterson, and T. I. Elliott (2002), The CSIRO Mk3 climate system model, *Technical Report 60*, CSIRO Atmospheric Research.

Gregory, D., and P. R. Rowntree (1990), A mass flux convection scheme with representation of cloud ensemble characteristics and stability-dependent closure, *Monthly Weather Review*, *118*, 1483–1506.

Gregory, J. M., and J. F. B. Mitchell (1997), The climate response to CO₂ of the Hadley Centre coupled AOGCM with and without flux adjustment, *Geophysical Research Letters*, *24*(15), 1943–1946.

Gregory, J. M., K. W. Dixon, R. J. Stouffer, A. J. Weaver, E. Driesschaert, M. Eby, T. Fichefet, H. Hasumi, A. Hu, J. H. Jungclaus, I. V. Kamenkovich, A. Levermann, M. Montoya, S. Murakami, S. Nawrath, A. Oka, A. P. Solokov, and R. B. Thorpe (2005), A model intercomparison of changes in the Atlantic thermohaline circulation in response to increasing atmospheric CO₂ concentration, *Geophysical Research Letters*, *32*, L12703, doi:10.1029/2005GL023209.

- Guilyardi, E. (2006), El Niño-mean state-seasonal cycle interactions in a multi-model ensemble, *Climate Dynamics*, *26*, 329–348.
- Guilyardi, E., S. Gualdi, J. Slingo, A. Navarra, P. Delecluse, J. Cole, G. Madec, M. Roberts, M. Latif, and L. Terray (2004), Representing El Niño in coupled ocean-atmosphere GCMs: The dominant role of the atmospheric component, *Journal of Climate*, *17*, 4623–4629.
- Hahn, C. J., S. G. Warren, and J. London (1995), The effect of moonlight on observation of cloud cover at night, and application to cloud climatology, *Journal of Climate*, *8*(5), 1429–1446.
- Hall, N. M. J., and P. J. Valdes (1997), A GCM simulation of the climate 6000 years ago, *Journal of Climate*, *10*, 3–17.
- Han, Y.-J. (1984), A numerical world ocean general circulation model. Part II. A baroclinic experiment, *Dynamics of Atmospheres and Oceans*, *8*, 141–172.
- Haney, R. L. (1971), Surface thermal boundary conditions for ocean circulation models, *Journal of Physical Oceanography*, *1*, 241–248.
- Harrison, S. P., D. Jolly, F. Laarif, A. Abe-Ouchi, B. Dong, K. Herterich, C. Hewitt, S. Joussaume, J. E. Kutzbach, J. Mitchell, N. de Noblet, and P. Valdes (1998), Intercomparison of simulated global vegetation distributions in response to 6 kyr BP orbital forcing, *Journal of Climate*, *11*, 2721–2742.
- Harrison, S. P., P. Braconnot, S. Joussaume, C. Hewitt, and R. J. Stouffer (2002), Comparison of palaeoclimate simulations enhances confidence in models, *EOS, Transactions, American Geophysical Union*, *83*(40), 447.
- Haywood, J. M., R. J. Stouffer, R. T. Wetherald, S. Manabe, and V. Ramaswamy (1997), Transient response of a coupled model to estimated changes in greenhouse gas and sulfate concentrations, *Geophysical Research Letters*, *24*(11), 1335–1338.
- Heil, P. (pers. comm.), Australian Antarctic Division.
- Hewitt, C. D., and J. F. B. Mitchell (1996), GCM simulations of the climate of 6 kyr BP: Mean changes and interdecadal variability, *Journal of Climate*, *9*, 3505–3529.
- Hewitt, C. D., and J. F. B. Mitchell (1998), A fully coupled GCM simulation of the climate of the mid-Holocene, *Geophysical Research Letters*, *25*(3), 361–364.
- Hirst, A. C. (1999), The Southern Ocean response to global warming in the CSIRO coupled ocean-atmosphere model, *Environmental Modelling & Software*, *14*, 227–241.
- Hirst, A. C., and W. Cai (1994), Sensitivity of a world ocean GCM to changes in subsurface mixing parameterization, *Journal of Physical Oceanography*, *24*, 1256–1279.
- Hirst, A. C., and J. S. Godfrey (1993), The role of Indonesian throughflow in a global ocean GCM, *Journal of Physical Oceanography*, *23*, 1057–1086.

- Hirst, A. C., and T. J. McDougall (1996), Deep-water properties and surface buoyancy flux as simulated by a z -coordinate model including eddy-induced advection, *Journal of Physical Oceanography*, *26*, 1320–1343.
- Hirst, A. C., and T. J. McDougall (1998), Meridional overturning and dianeutral transport in a z -coordinate model including eddy-induced advection, *Journal of Physical Oceanography*, *28*, 1205–1223.
- Hirst, A. C., H. B. Gordon, and S. O'Farrell (1996), Global warming in a coupled climate model including oceanic eddy-induced advection, *Geophysical Research Letters*, *23*(23), 3361–3364.
- Hirst, A. C., S. P. O'Farrell, and H. B. Gordon (2000), Comparison of a coupled ocean-atmosphere model with and without oceanic eddy-induced advection. Part I: Ocean spinup and control integration, *Journal of Climate*, *13*, 139–163.
- Hoar, M. R., J. P. Palutikof, and M. C. Thorne (2004), Model intercomparison for the present day, the mid-Holocene, and the Last Glacial Maximum over western Europe, *Journal of Geophysical Research*, *109*, D08104, doi:10.1029/2003JD004161.
- Hoelzmann, P., D. Jolly, S. P. Harrison, F. Laarif, R. Bonnefille, and H.-J. Pachur (1998), Mid-Holocene land-surface conditions in northern Africa and the Arabian peninsula: A data set for the analysis of biogeophysical feedbacks in the climate system, *Global Biogeochemical Cycles*, *12*(1), 35–51.
- Houghton, J. T., L. G. Meira Filho, J. Bruce, H. Lee, B. A. Callander, E. F. Haites, N. Harris, and K. Maskell (Eds.) (1994), *Climate Change 1994: Radiative Forcing of Climate Change and an Evaluation of the IPCC IS92 Emission Scenarios*, Cambridge University Press.
- Hu, A., G. A. Meehl, W. M. Washington, and A. Dai (2004), Response of the Atlantic thermohaline circulation to increased atmospheric CO₂ in a coupled model, *Journal of Climate*, *17*, 4267–4279.
- Hunt, B. G. (2004), The stationarity of global mean climate, *International Journal of Climatology*, *24*, 795–806.
- Hunt, B. G., and T. I. Elliott (2003), Secular variability of ENSO events in a 1000-year climatic simulation, *Climate Dynamics*, *20*, 689–703.
- Johns, T. C., C. F. Durman, H. T. Banks, M. J. Roberts, A. J. McLaren, J. K. Ridley, C. A. Senior, K. D. Williams, A. Jones, G. J. Rickard, S. Cusack, W. J. Ingram, M. Crucifix, D. M. H. Sexton, M. M. Joshi, B.-W. Dong, H. Spencer, R. S. R. Hill, J. M. Gregory, A. B. Keen, A. K. Pardaens, J. A. Lowe, A. Bodas-Salcedo, S. Stark, and Y. Searl (2006), The new Hadley Centre Climate Model (HadGEM1): Evaluation of coupled simulations, *Journal of Climate*, *19*, 1327–1353.

- Jolly, D., S. P. Harrison, B. Damnati, and R. Bonnefille (1998a), Simulated climate and biomes of Africa during the late Quaternary: Comparison with pollen and lake status data, *Quaternary Science Reviews*, *17*, 629–657.
- Jolly, D., I. C. Prentice, R. Bonnefille, A. Ballouche, M. Bengo, P. Brenac, G. Buchet, D. Burney, J.-P. Cazet, R. Cheddadi, T. Ector, H. Elenga, S. El-moutaki, J. Guiot, F. Laarif, H. Lamb, A.-M. Lezine, J. Maley, M. Mbenza, O. Peyron, M. Reille, I. Reynaud-Farrera, G. Riollet, J. C. Ritchie, E. Roche, L. Scott, I. Ssemmanda, H. Straka, M. Umer, E. V. Campo, S. Vilimumbalo, A. Vincens, and M. Waller (1998b), Biome reconstruction from pollen and plant macrofossil data for Africa and the Arabian peninsula at 0 and 6000 years, *Journal of Biogeography*, *25*, 1007–1027.
- Jones, P. D., and M. E. Mann (2004), Climate over past millennia, *Reviews of Geophysics*, *42*, RG2002, doi:10.1029/2003RG000143.
- Joussaume, S., K. E. Taylor, P. Braconnot, J. F. B. Mitchell, J. E. Kutzbach, S. P. Harrison, I. C. Prentice, A. J. Broccoli, A. Abe-Ouchi, P. J. Bartlein, C. Bonfils, B. Dong, J. Guiot, K. Herterich, C. D. Hewitt, D. Jolly, J. W. Kim, A. Kislov, A. Kitoh, M. F. Loutre, V. Masson, B. McAvaney, N. McFarlane, N. de Noblet, W. R. Peltier, J. Y. Peterschmitt, D. Pollard, D. Rind, J. F. Royer, M. E. Schlesinger, J. Sytkus, S. Thompson, P. Valdes, G. Vettoretti, R. S. Webb, and U. Wyputta (1999), Monsoon changes for 6000 years ago: Results of 18 simulations from the Paleoclimate Modeling Intercomparison Project (PMIP), *Geophysical Research Letters*, *26*(7), 859–862.
- Kanamitsu, M., W. Ebisuzaki, J. Woollen, S.-K. Yang, J. J. Hnilo, M. Fiorino, and G. L. Potter (2002), NCEP-DOE AMIP-II Reanalysis (R-2), *Bulletin of the American Meteorological Society*, *83*(11), 1631–1643.
- Kiehl, J. T., C. A. Shields, J. J. Hack, and W. D. Collins (2006), The climate sensitivity of the Community Climate System Model version 3 (CCSM3), *Journal of Climate*, *19*(11), 2584–2596.
- Killworth, P. D., D. A. Smeed, and A. J. G. Nurser (2000), The effects on ocean models of relaxation toward observations at the surface, *Journal of Physical Oceanography*, *30*, 160–174.
- Kitoh, A., and S. Murakami (2002), Tropical Pacific climate at the mid-Holocene and the Last Glacial Maximum simulated by a coupled ocean-atmosphere general circulation model, *Paleoceanography*, *17*(3), 1047, doi:10.1029/2001PA000724.
- Kohfeld, K. E., and S. P. Harrison (2000), How well can we simulate past climates? Evaluating the models using global palaeoenvironmental datasets, *Quaternary Science Reviews*, *19*, 321–346.
- Kowalczyk, E. A., J. R. Garratt, and P. B. Krummel (1991), A soil-canopy scheme for use in a numerical model of the atmosphere - 1D stand-alone model, *Technical Report 23*, CSIRO Division of Atmospheric Research.

- Kowalczyk, E. A., J. R. Garratt, and P. B. Krummel (1994), Implementation of a soil-canopy scheme into the CSIRO GCM - regional aspects of the model response, *Technical Report 32*, CSIRO Division of Atmospheric Research.
- Kutzbach, J., G. Bonan, J. Foley, and S. P. Harrison (1996), Vegetation and soil feedbacks on the response of the African monsoon to orbital forcing in the early to middle Holocene, *Nature*, *384*, 623–626.
- Kutzbach, J., R. Gallimore, S. Harrison, P. Behling, R. Selin, and F. Laarif (1998), Climate and biome simulations for the past 21,000 years, *Quaternary Science Reviews*, *17*, 473–506.
- Kutzbach, J. E., and P. J. Guetter (1986), The influence of changing orbital parameters and surface boundary conditions on climate simulations for the past 18 000 years, *Journal of the Atmospheric Sciences*, *43*(16), 1726–1759.
- Kutzbach, J. E., and F. A. Street-Perrott (1985), Milankovitch forcing of fluctuations in the level of tropical lakes from 18 to 0 kyr BP, *Nature*, *317*, 130–134.
- Lacis, A. A., and J. E. Hansen (1974), A parameterization for the absorption of solar radiation in the earth's atmosphere, *Journal of the Atmospheric Sciences*, *31*, 118–133.
- Lambert, S. J., and G. J. Boer (2001), CMIP1 evaluation and intercomparison of coupled climate models, *Climate Dynamics*, *17*, 83–106.
- Large, W. G., and S. Pond (1981), Open ocean momentum measurements in moderate to strong winds, *Journal of Physical Oceanography*, *11*, 324–336.
- Large, W. G., and S. Pond (1982), Sensible and latent heat flux measurements over the sea, *Journal of Physical Oceanography*, *12*, 464–482.
- Large, W. G., G. Danabasoglu, S. C. Doney, and J. C. McWilliams (1997), Sensitivity to surface forcing and boundary layer mixing in a global ocean model: Annual-mean climatology, *Journal of Physical Oceanography*, *27*, 2418–2447.
- Legates, D. R., and C. J. Willmott (1990), Mean seasonal and spatial variability in gauge-corrected, global precipitation, *International Journal of Climatology*, *10*, 111–127.
- Levis, S., G. B. Bonan, and C. Bonfils (2004), Soil feedback drives the mid-Holocene North African monsoon northward in fully coupled CCSM2 simulations with a dynamic vegetation model, *Climate Dynamics*, *23*, 791–802.
- Levitus, S. (1982), Climatological atlas of the World Ocean, *Professional Paper 13*, National Oceanographic and Atmospheric Administration.
- Liao, X., A. Street-Perrott, and J. F. B. Mitchell (1994), GCM experiments with different cloud parameterization: Comparisons with palaeoclimatic reconstructions for 6000 years B.P., *Palaeoclimates*, *1*, 99–123.

- Liu, Z., J. Kutzbach, and L. Wu (2000), Modeling climate shift of El Niño variability in the Holocene, *Geophysical Research Letters*, *27*(15), 2265–2268.
- Liu, Z., E. Brady, and J. Lynch-Stieglitz (2003a), Global ocean response to orbital forcing in the Holocene, *Paleoceanography*, *18*(2), 1041, doi:10.1029/2002PA000819.
- Liu, Z., B. Otto-Bliesner, J. Kutzbach, L. Li, and C. Shields (2003b), Coupled climate simulation of the evolution of global monsoons in the Holocene, *Journal of Climate*, *16*, 2472–2490.
- Lohmann, K., and M. Latif (2005), Tropical Pacific decadal variability and the subtropical-tropical cells, *Journal of Climate*, *18*, 5163–5178.
- Lorenz, S., B. Grieger, Ph. Helbig, and K. Herterich (1996), Investigating the sensitivity of the atmospheric general circulation model ECHAM 3 to paleoclimatic boundary conditions, *Geologische Rundschau*, *85*, 513–524.
- Lorenz, S. J., and G. Lohmann (2004), Acceleration technique for Milankovitch type forcing in a coupled atmosphere-ocean circulation model: method and application for the Holocene, *Climate Dynamics*, *23*, 727–743.
- Manabe, S., and R. J. Stouffer (1994), Multiple-century response of a coupled ocean-atmosphere model to an increase of atmospheric carbon dioxide, *Journal of Climate*, *7*, 5–23.
- Mann, M. E., and P. D. Jones (2003), Global surface temperatures over the past two millennia, *Geophysical Research Letters*, *30*(15), 1820, doi:10.1029/2003GL017814.
- Massom, R. (pers. comm.), Australian Antarctic Division.
- Masson, V., and S. Joussaume (1997), Energetics of the 6000-yr BP atmospheric circulation in boreal summer, from large-scale to monsoon areas: A study with two versions of the LMD AGCM, *Journal of Climate*, *10*, 2888–2903.
- Masson, V., S. Joussaume, S. Pinot, and G. Ramstein (1998), Impact of parameterizations on simulated winter mid-Holocene and Last Glacial Maximum climatic changes in the northern hemisphere, *Journal of Geophysical Research*, *103*(D8), 8935–8946.
- Masson, V., R. Cheddadi, P. Braconnot, S. Joussaume, D. Texier, and PMIP participants (1999), Mid-Holocene climate in Europe: what can we infer from PMIP model-data comparisons?, *Climate Dynamics*, *15*, 163–182.
- McAvaney, B. J., C. Covey, S. Joussaume, V. Kattsov, A. Kitoh, W. Ogana, A. J. Pitman, A. J. Weaver, R. A. Wood, and Z.-C. Zhao (2001), Model evaluation, in *Climate Change 2001: The Scientific Basis*, edited by J. T. Houghton, Y. Ding, D. J. Griggs, M. Noguer, P. J. van der Linden, X. Dai, K. Maskell, and C. A. Johnson, chap. 8, pp. 471–523, Cambridge University Press.

- McGregor, J. L. (1993), Economical determination of departure points for semi-Lagrangian models, *Monthly Weather Review*, *121*, 221–230.
- McGuffie, K., and A. Henderson-Sellers (1997), *A Climate Modelling Primer*, second ed., John Wiley and Sons.
- McGuffie, K., and A. Henderson-Sellers (2001), Forty years of numerical climate modelling, *International Journal of Climatology*, *21*, 1067–1109.
- Meehl, G. A., W. M. Washington, J. M. Arblaster, T. W. Bettge, and W. G. Strand, Jr. (2000), Anthropogenic forcing and decadal climate variability in sensitivity experiments of twentieth and twenty-first-century climate, *Journal of Climate*, *13*(21), 3728–3744.
- Meehl, G. A., C. Covey, B. McAvaney, M. Latif, and R. J. Stouffer (2005), Overview of the Coupled Model Intercomparison Project, *Bulletin of the American Meteorological Society*, *86*(1), 89–93.
- Meehl, G. A., W. M. Washington, B. D. Santer, W. D. Collins, J. M. Arblaster, A. Hu, D. M. Lawrence, H. Teng, L. E. Buja, and W. G. Strand (2006), Climate change projections for the twenty-first century and climate change commitment in the CCSM3, *Journal of Climate*, *19*(11), 2597–2616.
- Mikolajewicz, U., M. Scholze, and R. Voss (2003), Simulating near-equilibrium climate and vegetation for 6000 cal. years BP, *The Holocene*, *13*(3), 319–326.
- Mitchell, J. F. B., T. C. Johns, J. M. Gregory, and S. F. B. Tett (1995), Climate response to increasing levels of greenhouse gases and sulphate aerosols, *Nature*, *376*, 501–504.
- Mitchell, J. F. B., D. J. Karoly, G. C. Hegerl, F. W. Zwiers, M. R. Allen, and J. Marengo (2001), Detection of climate change and attribution of causes, in *Climate Change 2001: The Scientific Basis*, edited by J. T. Houghton, Y. Ding, D. J. Griggs, M. Noguer, P. J. van der Linden, X. Dai, K. Maskell, and C. A. Johnson, chap. 12, pp. 695–738, Cambridge University Press.
- Montoya, M., A. Griesel, A. Levermann, J. Mignot, M. Hofmann, A. Ganopolski, and S. Rahmstorf (2005), The earth system model of intermediate complexity CLIMBER-3 α . Part I: description and performance for present-day conditions, *Climate Dynamics*, *25*, 237–263.
- Moore, A. M., and H. B. Gordon (1994), An investigation of climate drift in a coupled atmosphere-ocean-sea ice model, *Climate Dynamics*, *10*, 81–95.
- Moore, A. M., and C. J. C. Reason (1993), The response of a global ocean general circulation model to climatological surface boundary conditions for temperature and salinity, *Journal of Physical Oceanography*, *23*, 300–328.
- Moy, C. M., G. O. Seltzer, D. T. Rodbell, and D. M. Anderson (2002), Variability of El Niño/Southern Oscillation activity at millennial timescales during the Holocene epoch, *Nature*, *420*, 162–165.

- National Oceanographic Data Center (2002), World Ocean Atlas 1998, URL http://www.nodc.noaa.gov/OC5/pr_woa.html, viewed 13 September 2005.
- Oberhuber, J. M. (1993), Simulation of the Atlantic circulation with a coupled sea ice-mixed layer-isopycnal general circulation model. Part I: Model description, *Journal of Physical Oceanography*, *23*, 808–829.
- O’Farrell, S. P. (1998), Investigation of the dynamic sea ice component of a coupled atmosphere-sea ice general circulation model, *Journal of Geophysical Research*, *103*(C8), 15,751–15,782.
- Olbers, D., D. Borowski, C. Völker, and J.-O. Wölf (2004), The dynamical balance, transport and circulation of the Antarctic Circumpolar Current, *Antarctic Science*, *16*(4), 439–470.
- Oreskes, N., K. Shrader-Frechette, and K. Belitz (1994), Verification, validation, and confirmation of numerical models in the earth sciences, *Science*, *263*, 641–646.
- Orsi, A. H., G. C. Johnson, and J. L. Bullister (1999), Circulation, mixing, and production of Antarctic Bottom Water, *Progress in Oceanography*, *43*, 55–109.
- Orsi, A. H., S. S. Jacobs, A. L. Gordon, and M. Visbeck (2001), Cooling and ventilating the abyssal ocean, *Geophysical Research Letters*, *28*(15), 2923–2926.
- Otto-Bliesner, B. L. (1999), El Niño/La Niña and Sahel precipitation during the middle Holocene, *Geophysical Research Letters*, *26*(1), 87–90.
- Otto-Bliesner, B. L., E. C. Brady, G. Clauzet, R. Tomas, S. Levis, and Z. Kothavala (2006), Last Glacial Maximum and Holocene climate in CCSM3, *Journal of Climate*, *19*(11), 2526–2544.
- Paleoclimate Modelling Intercomparison Project (2005), Paleoclimate Modelling Intercomparison Project Phase II, URL <http://www-lsce.cea.fr/pmip2/>, viewed 19 September 2005.
- Parkinson, C. L., D. L. Cavalieri, P. Gloersen, H. J. Zwally, and J. C. Comiso (1999), Arctic sea ice extents, areas, and trends, 1978–1996, *Journal of Geophysical Research*, *104*(C9), 20,837–20,856.
- Pavlov, A. A., O. B. Toon, A. K. Pavlov, J. Bally, and D. Pollard (2005), Passing through a giant molecular cloud: “Snowball” glaciations produced by interstellar dust, *Geophysical Research Letters*, *32*, L03705, doi:10.1029/2004GL021890.
- Philander, S. G. (1990), *El Niño, La Niña, and the Southern Oscillation*, Academic Press.
- Phipps, S. J. (2006), The CSIRO Mk3L climate system model, *Technical Report 3*, Antarctic Climate and Ecosystems Cooperative Research Centre, Hobart, Tasmania, Australia.
- Pierce, D. R. (1996), Reducing phase and amplitude errors in restoring boundary conditions, *Journal of Physical Oceanography*, *26*, 1552–1560.

- Pollard, D., J. C. Bergengren, L. M. Stillwell-Soller, B. Felzer, and S. L. Thompson (1998), Climate simulations for 10000 and 6000 years BP using the GENESIS global climate model, *Paleoclimates*, 2(2-3), 183–218.
- Power, S. B. (1995), Climate drift in a global ocean general circulation model, *Journal of Physical Oceanography*, 25, 1025–1036.
- Power, S. B., and R. Kleeman (1993), Multiple equilibria in a global ocean general circulation model, *Journal of Physical Oceanography*, 23, 1670–1681.
- Prell, W. L., and J. E. Kutzbach (1987), Monsoon variability over the past 150,000 years, *Journal of Geophysical Research*, 92(D7), 8411–8425.
- Prentice, I. C., and T. Webb, III (1998), BIOME 6000: reconstructing global mid-Holocene vegetation patterns from palaeoecological records, *Journal of Biogeography*, 25, 997–1005.
- Prentice, I. C., D. Jolly, and BIOME 6000 participants (2000), Mid-Holocene and glacial-maximum vegetation and geography of the northern continents and Africa, *Journal of Biogeography*, 27, 507–519.
- Press, W. H., S. A. Teukolsky, W. T. Vetterling, and B. P. Flannery (1992), *Numerical Recipes in C: The Art of Scientific Computing*, second ed., Cambridge University Press.
- Ramaswamy, V., O. Boucher, J. Haigh, D. Hauglustaine, J. Haywood, G. Myhre, T. Nakajima, G. Y. Shi, and S. Solomon (2001), Radiative forcing of climate change, in *Climate Change 2001: The Scientific Basis*, edited by J. T. Houghton, Y. Ding, D. J. Griggs, M. Noguer, P. J. van der Linden, X. Dai, K. Maskell, and C. A. Johnson, chap. 6, pp. 349–416, Cambridge University Press.
- Raper, S. C. B., J. M. Gregory, and R. J. Stouffer (2002), The role of climate sensitivity and ocean heat uptake on AOGCM transient temperature response, *Journal of Climate*, 15, 124–130.
- Renssen, H., H. Goosse, T. Fichefet, V. Masson-Delmotte, and N. Koç (2005), Holocene climate evolution in the high-latitude Southern Hemisphere simulated by a coupled atmosphere-sea ice-ocean-vegetation model, *The Holocene*, 15(7), 951–964.
- Reynolds, R. W., N. A. Rayner, T. M. Smith, D. C. Stokes, and W. Wang (2002), An improved in situ and satellite SST analysis for climate, *Journal of Climate*, 15, 1609–1625.
- Robert, A. J. (1966), The integration of a low order spectral form of the primitive meteorological equations, *Journal of the Meteorological Society of Japan*, 44(5), 237–244.
- Robertson, A., J. Overpeck, D. Rind, E. Mosley-Thompson, G. Zielinski, J. Lean, D. Koch, J. Penner, I. Tegen, and R. Healy (2001), Hypothesised climate forcing time series for the last 500 years, *Journal of Geophysical Research*, 106(D14), 14,783–14,803.

- Rodbell, D. T., G. O. Seltzer, D. M. Anderson, M. B. Abbott, D. B. Enfield, and J. H. Newman (1999), An ~15,000-year record of El Niño-driven alluviation in southwestern Ecuador, *Science*, *283*, 516–520.
- Ropelewski, C. F., and P. D. Jones (1987), An extension of the Tahiti-Darwin Southern Oscillation Index, *Monthly Weather Review*, *115*, 2161–2165.
- Rotstayn, L. D. (1997), A physically based scheme for the treatment of stratiform clouds and precipitation in large-scale models. I: Description and evaluation of the microphysical processes, *Quarterly Journal of the Royal Meteorological Society*, *123*, 1227–1282.
- Rotstayn, L. D. (1998), A physically based scheme for the treatment of stratiform clouds and precipitation in large-scale models. II: Comparison of modelled and observed climatological fields, *Quarterly Journal of the Royal Meteorological Society*, *124*, 389–415.
- Rotstayn, L. D. (2000), On the “tuning” of autoconversion parameterizations in climate models, *Journal of Geophysical Research*, *105*(D12), 15,495–15,507.
- Ruddiman, W. F. (2003), The anthropogenic greenhouse era began thousands of years ago, *Climatic Change*, *61*, 261–293.
- Sausen, R., K. Barthel, and K. Hasselmann (1988), Coupled ocean-atmosphere models with flux correction, *Climate Dynamics*, *2*, 145–163.
- Schott, F. A., T. N. Lee, and R. Zantopp (1988), Variability of structure and transport of the Florida Current in the period range of days to seasonal, *Journal of Physical Oceanography*, *18*, 1209–1230.
- Schwarzkopf, M. D., and S. B. Fels (1985), Improvements to the algorithm for computing CO₂ transmissivities and cooling rates, *Journal of Geophysical Research*, *90*(D6), 10,541–10,550.
- Schwarzkopf, M. D., and S. B. Fels (1991), The simplified exchange method revisited: An accurate, rapid method for computation of infrared cooling rates and fluxes, *Journal of Geophysical Research*, *96*(D5), 9075–9096.
- Semtner, A. J., Jr. (1976), A model for the thermodynamic growth of sea ice in numerical investigations of climate, *Journal of Physical Oceanography*, *6*, 379–389.
- Shulmeister, J., and B. G. Lees (1998), Pollen evidence from tropical Australia for the onset of an ENSO-dominated climate at c. 4000 BP, *Holocene*, *5*(1), 10–18.
- Sloan, L. C. (2006), A framework for regional modeling of past climates, *Theoretical and Applied Climatology*, *86*, 271–279, doi:10.1007/s00704-005-0207-3.
- Smethie, W. M., Jr., and R. A. Fine (2001), Rates of North Atlantic Deep Water formation calculated from chlorofluorocarbon inventories, *Deep-Sea Research Part I: Oceanographic Research Papers*, *48*, 189–215.

- Stainforth, D. A., T. Aina, C. Christensen, M. Collins, N. Faull, D. J. Frame, J. A. Kettleborough, S. Knight, A. Martin, J. M. Murphy, C. Piani, D. Sexton, L. A. Smith, R. A. Spicer, A. J. Thorpe, and M. R. Allen (2005), Uncertainty in predictions of the climate response to rising levels of greenhouse gases, *Nature*, *433*(7024), 403–406.
- Stammer, D., C. Wunsch, R. Giering, C. Eckert, P. Heimbach, J. Marotzke, A. Adcroft, C. N. Hill, and J. Marshall (2003), Volume, heat, and freshwater transports of the global ocean circulation 1993–2000, estimated from a general circulation model constrained by World Ocean Circulation Experiment (WOCE) data, *Journal of Geophysical Research*, *108*(C1), 3007, doi:10.1029/2001JC001115.
- Stouffer, R. J., and S. Manabe (2003), Equilibrium response of thermohaline circulation to large changes in atmospheric CO₂ concentration, *Climate Dynamics*, *20*, 759–773.
- Stouffer, R. J., A. J. Broccoli, T. L. Delworth, K. W. Dixon, R. Gudgel, I. Held, R. Hemler, T. Knutson, H.-C. Lee, M. D. Schwarzkopf, B. Soden, M. J. Spelman, M. Winton, and F. Zeng (2006), GFDL’s CM2 global coupled climate models. Part IV: Idealised climate response, *Journal of Climate*, *19*, 723–740.
- TEMPO (1996), Potential role of vegetation feedback in the climate sensitivity of high-latitude regions: A case study at 6000 years B.P., *Global Biogeochemical Cycles*, *10*(4), 727–736.
- Terray, L. (1998), Sensitivity of climate drift to atmospheric physical parameterizations in a coupled ocean-atmosphere general circulation model, *Journal of Climate*, *11*, 1633–1658.
- Texier, D., N. de Noblet, S. P. Harrison, A. Haxeltine, D. Jolly, S. Joussaume, F. Laarif, I. C. Prentice, and P. Tarasov (1997), Quantifying the role of biosphere-atmosphere feedbacks in climate change: coupled model simulations for 6000 years BP and comparison with palaeodata for northern Eurasia and northern Africa, *Climate Dynamics*, *13*, 865–882.
- Texier, D., N. de Noblet, and P. Braconnot (2000), Sensitivity of the African and Asian monsoons to mid-Holocene insolation and data-inferred surface changes, *Journal of Climate*, *13*, 164–181.
- Toggweiler, J. R., and B. Samuels (1995), Effect of sea ice on the salinity of Antarctic bottom waters, *Journal of Physical Oceanography*, *25*, 1980–1997.
- Trenberth, K. E. (1997), The definition of El Niño, *Bulletin of the American Meteorological Society*, *78*(12), 2771–2777.
- Trenberth, K. E., and T. J. Hoar (1996), The 1990–1995 El Niño–Southern Oscillation event: Longest on record, *Geophysical Research Letters*, *23*(1), 57–60.
- Tudhope, A. W., C. P. Chilcott, M. J. McCulloch, E. R. Cook, J. Chappell, R. M. Ellam, D. W. Lea, J. M. Lough, and G. B. Shimmield (2001), Variability in the

- El Niño-Southern Oscillation through a glacial-interglacial cycle, *Science*, *291*, 1511–1517.
- Tziperman, E., J. R. Toggweiler, Y. Feliks, and K. Bryan (1994), Instability of the thermohaline circulation with respect to mixed boundary conditions: Is it really a problem for realistic models?, *Journal of Physical Oceanography*, *24*, 217–232.
- UNESCO (1981), Background papers and supporting data on the International Equation of State of Seawater 1980, *Technical Papers in Marine Science* *38*, UNESCO.
- Vettoretti, G., W. R. Peltier, and N. A. McFarlane (1998), Simulations of mid-Holocene climate using an atmospheric general circulation model, *Journal of Climate*, *11*, 2607–2627.
- Vettoretti, G., W. R. Peltier, N. A. McFarlane, and PMIP participating groups (2000), The simulated response of the climate system to changes in soil moisture parameterization under paleoclimatic boundary conditions at 6000 years before present, *Canadian Journal of Earth Sciences*, *37*(5), 635–660.
- Vimont, D. J., D. S. Battisti, and A. C. Hirst (2002), Pacific interannual and interdecadal equatorial variability in a 1000-yr simulation of the CSIRO coupled general circulation model, *Journal of Climate*, *15*, 160–178.
- Voss, R., and U. Mikolajewicz (2001), The climate of 6000 years BP in near-equilibrium with a coupled AOGCM, *Geophysical Research Letters*, *28*(11), 2213–2216.
- Wadhams, P. (2000), *Ice in the Ocean*, Gordon and Breach Science Publishers.
- Walland, D. J., S. B. Power, and A. C. Hirst (2000), Decadal climate variability simulated in a coupled general circulation model, *Climate Dynamics*, *16*, 201–211.
- Wang, W.-C., X.-Z. Liang, M. P. Dudek, D. Pollard, and S. L. Thompson (1995), Atmospheric ozone as a climate gas, *Atmospheric Research*, *37*, 247–256.
- Wang, Y., L. A. Mysak, Z. Wang, and V. Brovkin (2005), The greening of the McGill Paleoclimate Model. Part I: Improved land surface scheme with vegetation dynamics, *Climate Dynamics*, *24*, 469–480.
- Warren, S. G., C. J. Hahn, J. London, R. M. Chervin, and R. L. Jenne (1986), Global distribution of total cloud cover and cloud type amounts over land, *Technical Note NCAR/TN-273+STR*, NCAR.
- Warren, S. G., C. J. Hahn, J. London, R. M. Chervin, and R. L. Jenne (1988), Global distribution of total cloud cover and cloud type amounts over the ocean, *Technical Note NCAR/TN-317+STR*, NCAR.
- Washington, W. M., and C. L. Parkinson (1986), *An Introduction to Three-Dimensional Climate Modeling*, Oxford University Press.

- Weaver, A. J., and T. M. C. Hughes (1996), On the incompatibility of ocean and atmosphere models and the need for flux adjustments, *Climate Dynamics*, *12*, 141–170.
- Weaver, A. J., and E. S. Sarachik (1991a), Evidence for decadal variability in an ocean general circulation model: An advective mechanism, *Atmosphere-Ocean*, *29*(2), 197–231.
- Weaver, A. J., and E. S. Sarachik (1991b), The role of mixed boundary conditions in numerical models of the ocean's climate, *Journal of Physical Oceanography*, *21*(9), 1470–1493.
- Weaver, A. J., J. Marotzke, P. F. Cummins, and E. S. Sarachik (1993), Stability and variability of the thermohaline circulation, *Journal of Physical Oceanography*, *23*, 39–60.
- Weaver, A. J., M. Eby, E. C. Wiebe, C. M. Bitz, P. B. Duffy, T. L. Ewen, A. F. Fanning, M. M. Holland, A. MacFadyen, H. D. Matthews, K. J. Meissner, O. Saenko, A. Schmittner, H. Wang, and M. Yoshimori (2001), The UVic Earth System Climate Model: Model description, climatology, and applications to past, present and future climates, *Atmosphere-Ocean*, *39*(4), 361–428.
- Weber, S. L. (2001), The impact of orbital forcing on the climate of an intermediate-complexity coupled model, *Global and Planetary Change*, *30*, 7–12.
- Weber, S. L., T. J. Crowley, and G. van der Schrier (2004), Solar irradiance forcing of centennial climate variability during the Holocene, *Climate Dynamics*, *22*, 539–553.
- Wigley, T. M. L., and S. C. B. Raper (1987), Thermal expansion of sea water associated with global warming, *Nature*, *330*, 127–131.
- Wilks, D. S. (1995), *Statistical Methods in the Atmospheric Sciences*, Academic Press.
- Wittenberg, A. T., A. Rosati, N.-C. Lau, and J. A. Ploshay (2006), GFDL's CM2 global coupled climate models. Part III: Tropical Pacific climate and ENSO, *Journal of Climate*, *19*, 698–722.
- Wood, R. A., M. Vellinga, and R. Thorpe (2003), Global warming and thermohaline circulation stability, *Philosophical Transactions of the Royal Society of London A*, *361*, 1961–1975.
- Yu, G., and S. P. Harrison (1996), An evaluation of the simulated water balance of Eurasia and northern Africa at 6000 y BP using lake status data, *Climate Dynamics*, *12*, 723–735.
- Zhang, S., R. J. Greatbatch, and C. A. Lin (1993), A reexamination of the polar halocline catastrophe and implications for coupled ocean-atmosphere modeling, *Journal of Physical Oceanography*, *23*, 287–299.

Zhang, Y., J. M. Wallace, and D. S. Battisti (1997), ENSO-like interdecadal variability: 1900-1993, *Journal of Climate*, *10*, 1004–1020.